No.



8200187

# HHE UNITHED STEATES OF ANTERION

TO ALL TO WHOM THESE PRESENTS SHALL COME:

# Nofts Seed Inc.

Talkereas, there has been presented to the

#### Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF eighteen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EX-

OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, ORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 42, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

KENTUCKY BLUEGRASS

'Georgetown'

In Lestimony Wincrest, I have hereunto set my hand and caused the seal of the Plant Turiety Protection Office to be affixed at the City of washington this 21st day of July in the year of our Lord one thousand nine

hundred and eighty-three.

John R Black

Secretary of Agriculture

Aller

Canall HEran

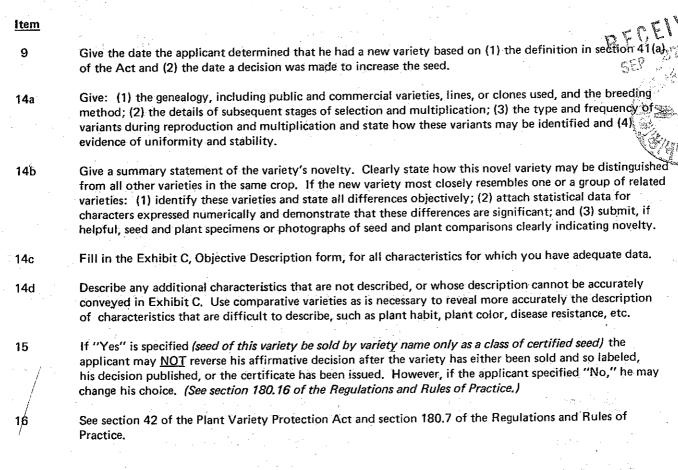
Plant Variety Protection Office Grain Division

Agricultural Marketing Service

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, MEAT, GRAIN & SEED DIVISION			FORM APPROVED: OMB NO.0581-0055			
APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE (Instructions on reverse)			No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).			
1. NAME OF APPLICANT(S)		2. TEMPORARY	DESIGNATION	3. VARIETY N	AME	
Lofts Seed Inc.		RI Ppl		George	town	
4. ADDRESS (Street and No. or R.F.D. No., City, State Chimney Rock Road, P.O.Box Bound Brook, NJ 08805	e, and Zip Code) x 146	5. PHONE (Included 201–560–	-	PVPO NUMBER	C187	:
6. GENUS AND SPECIES NAME	7. FAMILY NAI			DATE 9/2	7/82	
<u>Poa pratensis</u>	Gramine	eae		3:00	~	P.M.
8. KIND NAME	9.	DATE OF DETER	MINATION		FOR FILING	<del></del>
Kentucky Bluegrass		1962		\$ _500 DATE 9/2 AMOUNT	.00 7/82	
<ol> <li>IF THE APPLICANT NAMED IS NOT A "PERSO! partnership, association, etc.)</li> </ol>	N," GIVE FORM	OF ORGANIZATIO	ON (Corporation,	<b>S</b> 250.	FOR CERTIFICAT	<u>'E'</u>
Corporation				6/3/8	83	
11. IF INCORPORATED, GIVE STATE OF INCORPO	RATION	•		12. DATE OF IN 11/10	CORPORATION	
13. NAME AND ADDRESS OF APPLICANT REPRES	ENATIVE(S), IF	ANY, TO SERVE I	N THIS APPLICA			
Mr. Richard Hurl P.O. Box 146, Bo					· .	
14. CHECK APPROPRIATE BOX FOR EACH ATTAC	HMENT SUBMIT	TED				
a. X Exhibit A, Origin and Breeding History of the Section 52 of the Plant Variety Protection Ac	Variety (See t.)	c. Exhil	oit C, Objective De Plant Variety Pro	escription of the V tection Office.)	ariety (Request for	m
b. X Exhibit B, Novelty Statement		d. 🐔 Exhil	oit D, Additional I	Description of the	Variety	
15. DOES THE APPLICANT(S) SPECIFY THAT SEED SEED? (See Section 83(a) of the Plant Variety Prof	tection Act.)	·		ONLY AS A CLA	_	_
16. DOES THE APPLICANT(S) SPECIFY THAT THIS LIMITED AS TO NUMBER OF GENERATIONS?	VARIETY BE	17. IF "YES" BEYOND	TO ITEM 16, W	HICH CLASSES ( D?	OF PRODUCTION	
X Yes No  18. DID THE APPLICANT(S) FILE FOR PROTECTION	N OF THE WAR	X Found		Registered	X Certifi	ed
18. DID THE APPLICANT(S) FILE FOR PROTECTIO	N OF THE VARI	ETY IN THE U.S. (	OR OTHER COU	NTRIES?	Yes (If "Yes," give of countries and da	
				X	No	
19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OF	OTHER COUNT	FRIES?		. 🗆	Yes (If "Yes," give of countries and da	
				X	No	
20. The applicant(s) declare(s) that a viable sampl plenished upon request in accordance with such	ch regulations a	s may be applical	ole.			
The undersigned applicant(s) is (are) the owne distinct, uniform, and stable as required in Section Act.	ction 41, and is	entitled to prote	ction under the	provisions of Se	ection 42 of the P	y is 'lant
Applicant(s) is (are) informed that false repres	entation herein	can jeopardize p	rotection and re	esult in penaltie	5.	
SIGNATURE/OF APPLICANT	-			9/24	1/82	·····
SIGNATURE OF APPLICANT	·	·		DATE!	, Barrier	1
FORM LMGS-470 (9-81) (Edition of 1-78 is obsolete)						

#### INSTRUCTIONS

General: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Department of Agriculture, Agricultural Marketing Service, Livestock, Meat, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.



GPO 890-69

#### EXHIBIT A

#### ORIGIN AND BREEDING HISTORY OF GEORGETOWN KENTUCKY BLUEGRASS

The original clone of Georgetown Kentucky Bluegrass was discovered in a farmyard in Rickreall, Oregon in 1959 by F. B. Ledeboer. The clone was maintained as a vegetative plot until 1964. Two generations of seed were produced in Western Oregon from spaced-plants of the original selection.

In 1964, seed was transferred to the University of Rhode Island Agricultural Experiment Station and entered into the URI turf trials as R.I.Pp-1. Seed was produced in 1968 at URI and R.I.Pp-1 was included in the NE-57 Regional Kentucky Bluegrass Trials.

In 1972 a breeder block of approximately 500 spaced-plants was established, from seed produced in Western Oregon, at Virginia Polytechnical Institute and State University in Blacksburg, VA under the direction of Dr. Lincoln Taylor.

Seed produced from the Virginia breeder block was used to establish a breeder block in Tilma, Idaho, under the direction of Dr. Ron Ensign. In 1976, Dr. Ledeboer selected approximately 200 plants and transferred them in bags tagged by the Idaho Seed Certification officials to Lofts' Oak Knoll Farm in Albany, Oregon. The bags were opened in the presence of Mr. Don Brewer, Oregon Seed Certification official, and were used to establish a breeder block. Prior to anthesis, the plants were rogued to uniformity. Breeder seed produced at Oak Knoll was used to plant a breeder nursery in Post Falls, Idaho. After careful roguing of the

spaced-plants by F. B. Ledeboer, all plants were judged to be identical to the original R.I.Pp-1 cultivar. This planting served as the breeder block from which foundation fields would be planted.

A foundation field was established in May 1981. First sale of certified seed for Georgetown occurred in August of 1982.

Georgetown is a highly apomictic variety with over 90% of progeny plants being indistinguishable from maternal plants. All aberrant plants, which usually are smaller and weaker than the maternal plants, were rogued from breeder and foundation fields to insure uniformity and stability.

#### EXHIBIT B

#### STATEMENT OF NOVELTY OF GEORGETOWN KENTUCKY BLUEGRASS

Georgetown can be distinguished from all other cultivars by the combination of spaced-plant and turf characteristics shown in Tables 1-14.

Georgetown most closely resembles Trenton. They differ in the following characteristics:

- 1. Georgetown has a longer panicle length (110mm) compared to Trenton (92mm) (Table 1).
- 2. Georgetown has hair on the leaf sheath, where Trenton does not (Table 2).
- 3. Georgetown has hair on the margin of the leaf sheath, where Trenton does not (Table 3).

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, MEAT, GRAIN, & SEED DIVISION PLANT VARIETY PROTECTION OFFICE BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Bluegrass)

OBJECTIVE DESCRIPTION OF VARIETY

			RASS (Poa spp.			
NAME OF APPL	ICANT(\$)	T	EMPORARY DESIG	NATION VARIETY	NAME	
Lofts Se	ed Inc.		RI Ppl	Ge	orgetown	
ADDRESS (Street	et and No. or R.F.D. No., City, State, ROCK ROad	and Zip Cod	le)		OFFICIAL USE	ONLY
P. O. Bo	and the second s			PVPO NU	MBER	
	ook, NJ 08805			8	00/8	7
	er which characterizes the variety in th	e features de	escribed below For			
be recorded to h typical for the va to determine pla	lanks (e.g., 1019, 101811). Those elp establish novelty or uniqueness. Curiety. Measured data should be for SI unt colors; designate system used: AS lants used:	characterist haracteristics	ics marked with a sta s described, including	r 🐥 are preferre r numerical measurer	ed to be recorded. nepts, should repr	Any others should
						<del>,</del>
1. SPECIES:						<u> </u>
2	1 = Poa compressa	2 = P. prat	ensis	3 = P. trivialis	4 =	= Others (Specify)
	Chromosome number		·		· · · · · · · · · · · · · · · · · · ·	
1 1	N: (0 = Not tested, 1 = Not adapted,	2 = Adapted	d, 3 = Well adapted)	:		
3	Northeast 3	Transitiona	l zone 1	Southeast	_3 No	orth Central
3	Pacific N.W.	Intermount	tain 1	Southwest (CA., A	(Z.)	200
	Other (Specify)	•	<u> </u>			
3. MATURITY	At first anthesis): Give test area A	delphia	1, NJ			· ·
* 5			(Delta, Mystic)	2 - Modium couls	(Evilian Nones)	
الكا	T VOIY CALLY	2 - Carry	(Derta, Mystic)	3 = Medium early	(Fylking, Nugget)	Tall to the second
	4 = Medium late (Newport, Adelphi	, Aquila)		5 = Late (Merion,	Baron, Enmundi)	Service of
	6 = Very late (Pacific)					and the second
·	<u>May 29, 1970</u>	Date of Fir	st Anthesis			
	Number of days earlier than		1 = Nugget	2 = Fylking	3 = Delta	
	Maturity same as	4	4 = Merion	5 = Newport	6 = Baron	, es
0 9	Number of days later than	3	7 = Mystic	8 = Sabre	9 = Reubens	
4. PLANT HEIG	HT (At maturity-Average of longest sh	oot of 10 pl	ants from soil surfac	e to top of panicle):	Test area Ade	Lphia, N.J.
* 4	1 = Short (Nugget)		n short (Baron, Fylki			<del></del>
	3 = Medium tall (Merion, Adelphi)		4 = Tail (Delta)	5 T	- Very tall	,
* 0 7 5	cm Height (Table 4)		er un die die			
0 4	cm Shorter than ★ 5	<b>)</b>	1 = Nugget	2 = Fylking	3 =Delta	4 = Merion
	Height same as	\$	5 = Newport	6 = Baron	7 = Mystic	8 = Sabre
3 2	-	<b>1</b>		5 Baron,	, wiystic	o - Sable
اكاكا	cm Taller than	<i>f</i>	9 = Reubens		•	
	<u> </u>					
5. GROWTH HA!	BIT:					•
* 2	Habit: 1 = Prostrate (Nugget)		2 = Semi-prostrate	(Merion)	3 = Erect	(Delta)
	cm Amount of spread by rhizomes in	n 1 vaar leke	to tost pros			,
	with minerals of spread by this (iles il	ı ı year (giv	e test glag	· · ·		

FORM LMGS 470-60 (7-82)

ъ. і	EAF D	LAVE	•			ta de la companya de	
	*[	3	Green Color:	1 = Light green (Mystic)	2 = Medium green (Fyl	king, Bonnieblue)	
	,		•	3 = Moderately dk. green (M	ferion, Adelphi) 4 =	Very dk. green (Nugget, Glade,	, Enmundi)
	* [	1	Bluegreen color:	1 = Not bluegreen (Mystic,	Touchdown, Parade) 2 =	Moderately bluegreen (Merion,	A-34)
		_=_		3 = Bluegreen (Nugget, Enm	undi, Adelphi) 4 =	Strongly bluegreen (Majestic)	·
	ſ		Winter color:	1 = Light green	2 = Dark green	3 = Light purple	
				4 = Dark purple	5 = Not purple	6 = Not green or purple	
	*[	1	Hairs upper side:	1 = Absent (Nugget)	2 = Sparse (Merion)	3 = Dense (Park)	· ·
ž÷.		<u> </u>	Hairs lower side:	1 = Absent (Fylking, Merion	) 2 = Sparse	3 = Dense (Nugget)	
	Ī		Luster upper side:	1 = Shiny (Eclipse, Enmund	i) 2 = Dull (Aquila, Parad	le)	
	. [		Luster lower side:	1 = Shiny (Mystic, Enmundi	) 2 = Dull (Barbie, Eclips	se)	
	ું∗ે		Margin hairs (Fring	ge on Margin or Base):	1 = Absent (Delta)	2 = Present (Fylking, Merion	a de la
	* [	3	Width:	1 = Very fine (Mystic)	2 = Fine (Nugget)	3 = Medium (Merion, Fylkin	g)
		- <b></b>		4 = Broad (Adelphi, Baron)	5 = Very broad (Mono)	poly)	
	0	4	mm Width (flag lea	<sub>af)</sub> (Table 5)		•	
	0	1	mm Narrower than	*	1 = Nugget	2 = Fylking	3 = Delta
			Width same as	*   2   }	4 = Merion	5 = Newport	6 = Baron
	0	1	mm Wider than	* 3 )	7 = Mystic	8 = Sabre	9 = Reubens
0	6	0	mm Length (flag le	eaf)(Table 15)			
-	T <sub>1</sub> T	7	mm Shorter than	* 5	1 = Nugget	2 = Fylking	3 = Delta
	<del>الكار</del>		Length same as	* 🗍 }	4 = Merion	5 = Newport	6 = Baron
	2	2	mm Longer than	* 1	7 = Mystic	8 = Sabre	9 = Reubens
		0	Position of flag lea	f (angle to stem):	1 = Appressed	2 = Open angle, yet stiff	3 = Nodding
7. 1	EAF S	HEATI	<del>1</del> :				e de la Maria
			mm sheath length				
	*[	1	Seedling Color (bas	se of sheath): 1 = Green (Nug	and the second of the second o		
	* [	2	Hairs on Margin:	1 = Absent (Fylking)	2 = Present (Nugget)	taj daga en	en e
	*	1	Margin Roughness	(to touch): 1 = Smooth			
		2	Hairs on Surface:	1 = Absent (Trentor	) 2 = Pi	resent (Nugget)	
			Surface Roughness	(to touch): 1 = Smooth	(Fylking) 2 - Rough	(Ram I)	1
2 1			Hairs on both sides	just beneath leaf blade (unde	er collar): 1 = Absent (I	Merion) 2 = Present (Nugge	et) 3
	*		Hairs on Ligule:	1 = Absent (Fylking) 2	=Short (Baron) 3 =	Long (Nugget)	
			Glaucosity: 1	=Absent (Mystic, Enmundi)	2 = Present (Birka)		
			Keel: 1 = Abset	nt (Ram I) 2 = Present	(Adelphi)		* .
				and the second second second			1

8. PANICLE (Mature Plant): (Ta	able 1)			020018/
[ <del></del> ]	vest branch whorl to top, for	r 10 plants) Test area:	Adelphia,	New Jersey
0 1 0 mm Shorter than	<b>*</b> 1 1	2 = Fylking	3 = Delta	
Panicle same as	4 = Merion	5 = Newport	6 = Baron	
0 4 3 mm Longer than	7 = Mystic	8 = Sabre	9 = Reubens	
Color (at 50% flo	ر سبب ر owering): 1 ≃ Not red (Fylki	ing) 2 = Red (N	lugget)	
	(opposite lower side branche	es): 1 = No ben	d (Nugget 2	= Bend (Merion)
* 2 Collar:	1 = Opened (Nugge	et) 2 = Closed	(Merion)	
* 3 Branches Attitud	e (Lowest whorl):	1 = Drooping (Americ 3 = Ascending (Tunda		= Horizontal (Merion)
3 3 Number of main	branches in lowest whorl	· · · · · · · · · · · · · · · · · · ·		
2 Panicle Habit:	1 = Nodding (New)	port) 2 = Upright	(Nugget)	·
★ Panicle Type:	1 = Open	2 = Intermediate 3	= Compact	
Anther color (ant	hesis): 1 = Purple	2 = Yellow 3	= Brown	
). LEMMA ★ 3 Keel	1 = Glabrous	2 = Slightly pubescent	t 3:	= Pubescent
★ 3 Marginal Nerves	<b>y</b> -			
Intermediate Nerv	ves: 1 = Distinct	2 = Obscure		
Basal Webbing:	1 = Absent	2 = Scant (Baron) 3	= Copious (Merion)	
0. SEED: (Floret-not dehulled)				
★ 1 Apomixis Percent	age: 1 = more than 95	9	= 85 to 95	3 = less than 85
Phenol Reaction:	1 = none-lemma rer		= Beige (Cougar)	3 = Brown (Windsor)
·	4 = Black (Mystic-2		= Black (	-24 hours)
mm. Width (avera		mm Length	, Diack (	-24 Hours)
Milligrams per 10,	000 seed			
Milligrams less tha	in [	1 = Nugget 2	= Fylking 3 =	Delta
Weight same as		4 = Merion 5	= Newport 6 =	Baron
Milligrams more ti	nan Î	7 = Reubens 8	= Sabre	
₩eight Class (g pe	r 10,000 seed):	1 = Light ( < 3g Sy	dsport, Merion)	
	•	2 = Medium ( 3g -	4g Adelphi, Parade)	·
· · · · · · · · · · · · · · · · · · ·		3 = Heavy ( > 4g Fy	lking, Nugget)	
<ol> <li>ENVIRONMENTAL RESISTANC Highly resistant)</li> </ol>	E: (0 = Not tested; 1 = Ver	ry susceptible; 2 = Moc	lerately susceptible;	3 = Moderately resistant; 4 =
Cool Temporatura	Colored Colored			
Cool Temperature (Winter color) (Tables 8	O Cold (injury)	3 Heat	2 Drought	
O Shade	0 Low Fertility	O Acid Soil	0 Alkalinity	1
0 Salinity	Soil Compaction	O Poor Drainag	e O Air Pollut	
Other (Specify)			7411 1 01101	
P. DISEASE RESISTANCE: (0 = N	ot tested 1 = Very susceptib	ale 2 = Madarataly ava	contible 2 - No. Jan	
Talchapies /.	10,11) slera poae (Helminthosporium	101	tina Patch S. borealis	
* 3 Helminthosporium	Leaf Spot Bipolaris sorokini	ana 4 Stem F	Rust <u>Puccinia gramin</u>	<sub>is</sub> (Table 12)
3 Brown Patch Rhizo	octonia solani	0 Stripe	Rust P. striiformis	
3 Powdery Mildew E	rysiphe graminis(Tables	: 12 <b>≯</b> 3 Leaf R	lust <u>P, poae-nemorali</u>	<u>s</u> (Tables 12,14)
* 4 Stripe Smut Ustiled	o strijformis	131	Stripe Rust P. poar	₺ . <sup></sup>

	<u> </u>	<u> </u>
12. DISEASE RESISTANCE (Continued)		1
O Flag Smut <u>Urocystis agropyri</u> Pythium Blight <u>Pythium spp.</u>		
Pink Snow Mold <u>Fusarium nivale</u> (Table 7) 4 Red Thread <u>Corticium fuciforme</u>	(Table	11)
O Ergot Claviceps purpurea O Other	<del>-</del>	
Fusarium Blight <u>Fusarium roseum</u> , <u>F. tricinctum</u> Other	-	
O Typhula Blight Typhula spp.		e je se filosofie
3 Dollar Spot Sclerotinia homoeocarpa (Table 11)	· · · · · · · · · · · · · · · · · · ·	
13. INSECTS, NEMATODES, RESISTANCE: (0 = Not tested; 1 = Very susceptible; 2 = Moderately susceptible; 3	= Moderately	resistant;
4 = Highly resistant)		
O Chinch Bug Blissus spp. (give species:	)	
O Sod Webworm Crambus spp. (give species:	)	
Bluegrass Billbug Sphenophorus parvulus	<u> </u>	
White Grub (Japanese Beetle, Chafers. (give species:	)	
O Greenbug Aphid Schizaphis graminum		
O Other		
O Other		
14. Give variety or varieties that most closely resemble the application variety. For the following characteristics in Resemblance by placing in the column marked D.R., one of the following numbers: 1 = Application variety is variety; 2 = Same as; 3 = More than, better, greater, darker, more disease resistant, etc.	dicate Degree less than con	of nparison
CHARACTER VARIETY D.R. CHARACTER VARIET	TY	D.R.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
	Trenton	2	Leaf width	Trenton	2
Maturity-heading	Trenton	† <u>2</u>	Leaf color spring	Trenton	2
Height Seed size	110110012		Leaf color summer	Trenron	2
Seed weight			Leaf color winter	Trenton	2
Cold injury	Trenton	2	Drought		
Heat	Trenton	2	Disease ★ ★		
Shade			Leaf Rust	Trenton	] 2

<sup>\*\*</sup> Specify each disease evaluated.

15. ADDITIONAL DESCRIPTION:

Describe all characteristics and conditions that cannot be adequately described in this form in Exhibit D.

Table 1. AVERAGE PANICLE LENGTH OF KENTUCKY BLUEGRASS CULTIVARS, ADELPHIA, NEW JERSEY, 1970.  $^{\rm L}$ 

CULTIVAR	PANICLE LENGTH
	mm
Nugget	67
Trenton	92
Merion	102
Newport	105
Georgetown	110
Fylking	118
Delta	120

Average of 3 plants in each of 2 replicates, 20 panicles per plant.

Table 2. PRESENCE OF HAIR ON THE LEAF SHEATH OF KENTUCKY BLUEGRASS CULTIVARS, ADELPHIA, NEW JERSEY, 1970.

CULTIVAR	HAIR ON LEAF SHEATH
	1 = present
Trenton	0
Georgetown	1.0

Table 3. PRESENCE OF HAIR ON THE MARGIN OF THE LEAF SHEATH OF KENTUCKY BLUEGRASS CULTIVARS, ADELPHIA, NEW JERSEY, 1970.

CULTIVAR	HAIR ON MARGIN OF LEAF SHEATH
•	1 = present
Trenton	0
Georgetown	1

Table 4. AVERAGE PLANT HEIGHT OF KENTUCKY BLUEGRASS CULTIVARS, ADELPHIA, NEW JERSEY, 1970.

CULTIVAR	PLANT HEIGHT	
	cm	
Nugget	43	
Fylking	60	
Merion	70	
Delta	73	
Trenton	75	
Georgetown	75	
Newport	79	

<sup>1</sup> Average of 5 plants in each of 2 replicates.

Table 5. AVERAGE LEAF WIDTH OF KENTUCKY BLUEGRASS CULTIVARS, ADELPHIA, NEW JERSEY, 1970.

CULTIVAR	LEAF WIDTH	
	mm	
Delta	2.6	
Nugget	3.0	
Georgetown	3.7	
Trenton	3.9	
Fylking	4.0	
Merion	4.3	
Newport	4.8	

<sup>1</sup> Average of 3 plants in each of 2 replicates, 20 leaves per plant.

Table 6. AVERAGE NUMBER OF PANICLES PER PLANT OF KENTUCKY BLUEGRASS CULTIVARS, ADELPHIA, NEW JERSEY, 1970.

CULTIVAR	NUMBER OF PANICLES
Nugget	140
Fylking	164
Delta	196
Trenton	201
Newport	246
Georgetown	249
Merion	280

<sup>1</sup> Average of 2 replicates, 3 plants each.

Table 10. Reaction of Kentucky bluegrass varieties to Helmintho-Sporium vagans in New Jersey under turf maintenance. 0 = best resistance.

	<del></del>	· · · · · · · · · · · · · · · · · · ·	
		Good Resistance	
Nugget	0.8	Birka	7 7
Warren's A-20	1.0	Adelphi	1.2
Touchdown	1.0	Columbia	1.3
Enmundi	1.0	Georgetown	1.4
Merion	1.0	, Parade	1.4
Bonnieblue	1.0	Trenton	1.4
Eclipse	1.0	Rubgy	1.4
Bristol	1.0	Warren's A-34	1.5
Majestic	1.1	Sydsport	1.5
Pennstar	1.2	Brunswick	1.7
Fylking	1.2		
		Moderate Resistance	
Victa	2.5	Merit	
Baron	2.5		2.9
Cheri	2.7	Vantage Windsor	3.0
Plush	2.7	Aquilla	3.5
Glade	2.9	RAM Í	3.5
	2.00	Senic	3.8
		Senic Se	3.8
	<u>N</u>	Moderate Susceptibility	
Newport	5.0	Prato	5.6
Cougar	5.2	Delft	5.7
		High Susceptibility	
		Magn busceptivifity	
Primo	6.5	Geary	7.5
Delta	7.0	S-21	7.5
S-21	7.3	Kenblue	7.5
Park	7.5	Nu Dwarf	7.5
Arboretum	7.5	Common (South Dakota)	7.7
Palouse	7.5	Troy	9.0

1968 Northeast Regional Kentucky Bluegrass Trial

Table 11. Mean and rank for Kentucky bluegrass disease resistance ratings
(9 = no disease) for spring leaf spot (April, May, Jure), summer
leaf spot (July, August, September), dollar spot, and red thread

	eaf spot	(July,	August,	Septe	ember).	dollar sp	of, an	d red t	.pxo>q tanınıcı
		Lear	_opo t	Leaf	Spot	Dollar	Snot	Red T	hread
<u>.</u>		Spr	ing .		mer		2000	- ACG 1	in cao
Entry		Mean	Rank	Mean	Rank	Mean	Rank	Kean	Rank
A-20		8.4	7	6.8	24	, ,			
NJE P-56		8.2	2	8.0	1	7.3	6	6.5	31
Nugget	•	8.2	2	7.1		6.6	30	0.8	7
Adelphi		7.9	4		17	3.9	43*	2.0	40
NJE P-114		7.9		7.1	17	7.2	9	0.8	7
NJE P-35	<del></del>		4	7.3		7.0	20	5.0	39
Sodco		7.8	6	7.4	14	7.6	2	9.0	1
NJE P-5		7.8	6	8.0	1	7.2	9	8.0	7
		7.7	8	7.6	8	7.2	9	8.0	7
Fylking		7.6	9	7.6		6.8	27	7.0	27
Sydsport		<b>7.</b> 6	9	7.9	4	5.9	37	8.0	7
Pennstar		7.5	11	7.5	13	6.5	34	7.3	26
Birka		7.5	- 11	7.7	5	7.0	20	7.0	27
WK-412		7.5	11	6.8	24	6.7	28	7.0	27
A-34		7.4	14	7.6	8	6.7	28	8.0	
Georgetown		7.4	14	7.6	8	7.1	16		7
Trenton		7.4	14	5.8	39			9.0	. ]
Merion	100	7.2	17	8.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	6.8	26	8.0	7
PSU K-128	4 5 5	7.2	17	3.0	43	5.8	38	6.0	35
PSU K-107	1 *	7.1	18	7.7		7.3	6	8.0	7
Zwartberg		6.7	19		5	6.5	34	7.5	23
Vantage				6.5	31	7.0	20	8.2	. 5
Primo		6.6	20	7.6	8	7.3	6	5.5	31
Belturf		6.4	21	7.0	20	7.2	9	7.7	20
K8-144		6.2	22	7.7	5	7.2	9	5.5	- 31
	100	6.1	23	6.6	28	5.4	40		
PSU K-162		6.0	24	6.4	32	0.8	3 -	8.2	5
K8-146		6.0	24	6.8	24	5.4	40	•	
Newport		5.9	26	7.2	16	7.2	9	9.0	i
Campus		5.8	27	6.0	36*	5.6	39	8.0	7
Aquila 📑 🦈		5.6	28	6.7	27	5.1	42		•
Arista		5.6	28	7.1	17	6.6	30*	3.5	• • •
Windsor		5.4	30	7.0	20	6.6		7.5	23
Cougar	* * * * * * * * * * * * * * * * * *	5.3	31	7.0	20*		30	5.5	37
Prato		5.1	32*			6.6	30	8.0	. 7
Park		4.9	33*	6.9	23	7.0	20	6.0	35
Delta	in in a second			5.9	38	7-4	5_	7.5	23
5-21		4.8	34	5.1	41	6.0	<b>.36*</b>	7.7	20
		4.8	34	5.6	40	7.2	9	8.3	4
WK-408		4.8	34	6.6	. 28* ⊹≕	7.1.	16	5.5	31
Minnesota 6 :		4.6	37	6.9	23	7.5	4	8_0	7
Palouse		4.6	37*	6.3	35 <b>*</b>	7.6	2	7.7	20
A-10		4.3	39*	5.0	42	7.0	20	6_7	30
Geary	* *	4.3	39*	6.4	32	7.1	16	8.0	7
Kenblue		3.8	41*	6.4	32 <sub>*</sub>	6.9	25	8.0	7
S. Dak. Certi		3.8	41*	6.0	36*	7.1	16	5.5	37
lo. of Locati	ons	1		<del>-1</del>	<del></del>			3.3	
Reporting:		9		4		4		,	
k	·	<u>-</u> _		<u></u>	<del></del>	. 4		]	

\* Indicates poorest resistance at one or more locations.

#### EXHIBIT D

#### ADDITIONAL DESCRIPTION

#### GEORGETOWN KENTUCKY BLUEGRASS

#### BREEDER BLOCK, TILMA IDAHO

8200187

Color - medium dark green

Rhizomes - vigorously rhizomatous

Date of anthesis - June 10, anthesis completed, June 23

Stems - no pubescence

Flag leaf - no pubescence

Collar - pubescent

Florets, green with purple tips on lemma

#### Panicle:

- base collar closed, slight crook at lowest whirl
- rachilla barbed
- rachis glabrous
- lowest whirl branches angled slightly upward, tips nodding
- rachis straight upright

#### Collar and sheath:

- hairs on sheath margins
- sparsely hairy on collar margins
- collar narrow, less than 1mm wide

#### Liqule:

- truncate
- margins serrated
- minute cilia on back

#### Leaf:

- margins slightly barbed
- upper surface rough but hairless
- lower surface rough, hairless, strongly ridged
- keel barbed

#### Spikelets:

- 4-5 florets per spikelet (5th floret often rudimentary)
- lemma 3-veined, intermittent purplish between hialine margins and body, margin heavily pubescent at lower 1/3, center keel pubescent
- anthers with purple margins prior to dehiscence

Flag leaf strongly appressed prior to and during anthesis

Stems dark-veined, veins paired with white, slightly raised dots

FILED

JAN 1 4 1998

LONNA R. HOOKS SECRETARY OF STATE

# CERTIFICATE OF MERGER OF LOFTS SEED, INC. INTO LOFTS MERGERCO, INC.

To: The Secretary of State State of New Jersey

Pursuant to the provisions of Section 14A:10-7 Corporations, General, of the New Jersey Statutes, the undersigned corporations hereby execute the following Certificate of Merger.

#### ARTICLE ONE

The names of the corporations proposing to merge and the states under the laws of which such corporations are organized, are as follows:

Name of Corporation

State of Incorporation

Lofts Seed, Inc. Lofts Mergerco, Inc.

New Jersey Nevada

#### ARTICLE TWO

The laws of the State of Nevada, the state under which such foreign corporation is organized, permit such merger and the applicable provisions of the laws of said jurisdiction have been, or upon compliance with filing and recording requirements will have been, complied with.

#### ARTICLE THREE

The name of the surviving corporation shall be Losts Mergerco, Inc. and it shall be governed by the laws of the State of Nevada.

The address of the surviving corporation's registered office is 2700 Sunset Rd., Las Vegas, Nevada 89120 and the name of the registered agent at such address is Johnny Thomas.

#### ARTICLE FOUR

The following plan of Merger was approved by the shareholders of the undersigned domestic corporation in the manner prescribed by the New Jersey Business Corporation Act, and was approved by the undersigned foreign corporation in the manner prescribed by the laws of the State under which it is organized:

0100731429

CILCL IN THE OFFICE OF THE SECRETARY OF STATE OF TH STATE OF NEVADA

# CERTIFICATE OF AMENDMENT OF

ARTICLES OF INCORPORATION OF

LUITS MERGERCO, INC.

JAN 2 6 1998 ::= C26394-97

AN HELLED SECRETARY OF STATE

Pursumn to the provisions of Nevada Revised Statutes, Title 7, Chapter 78, the undersigned officers do hereby certify:

FIRST: The name of the Corporation is Lofts Mergerco, Inc.

SECOND: The Board of Directors of the Corporation duly adopted the following resolutions on January 10, 1998:

RESOLVED, that it is advisable in the judgment of the Board of Directors of the Corporation that the name of the Corporation be changed, and that, in order to accomplish the same, Article FIRST of the Articles of Incorporation be amended to read as follows:

"FIRST: The name of the corporation (hereitafter called the Corporation) is Lofts Seed Company, Inc."

FURTHER RESOLVED, that a special meeting of the sole stockholder having voting power be and it is hereby called and that notice be given in the manner prescribed by the By-laws of the Corporation and by Nevada Revised Statutes, Title 7, Chapter 78, unless the said stockholder shall waive the notice of meeting in writing or unless the said stockholder shall dispense with the holding of a meeting and shall take action upon the proposed amendment by a consent in writing signed by the sole stockholder, and

FURTHER RESOLVED, that in the event that the said stockholder shall adopt the aforesaid proposed amendment by a vote in favor thereof by at least a majority of the voting power or by a written consent in favor thereof signed by the sole stockholder without a meeting, the Corporation is heroby authorized to make by the hands of its President or a Vice President and by its Secretary or an Assistant Secretary a certificate setting forth the said amendment and to cause the same to be filed pursuant to the provisions of Nevada Revised Statutes, Title 7, Chapter 78.

THIRD: The total number of outstanding shares having voting power of the Corporation is 200, and the total number of votes entitled to be cast by the holder of all of said outstanding shares is 200.

FOURTIL: The holder of all of the aforesaid total number of outstanding shares having voting power dispensed with the holding of a meeting of the sole stockholder and adopted the amendment herein certified by a consent in writing signed by the sole stockholder in accordance with the provisions of Nevada Revised Statutes, Title 7, Section 78.320.

January 22 1998

LOFTS MERGERCO, INC.

Johnny R. Thomas

President

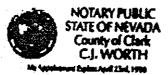
Kathleen L. Gillespi Assistant Secretary

State of Nevada )

) SS.:

County of Clark)

On January 22, 1998, personally appeared before me, a Notary Public, for the State and County aforesaid, Johnny R. Thomas, as President and Kathleen L. Gillespie, as Assistant Secretary of Lofts Mergerco. Inc., who acknowledged that they executed the above instrument.



Notary Public

STATE OF NEVADA

NOV 2 9 1999

OF

LOFTS SEED COMPANY, INC.

ARTICLES OF MERGER

INTO

AGRIBIOTECH, INC.

DEAN HELLER, SECRETARY OF STATE

Pursuant to the provisions of N.S.R. § 92A.180 and N.R.S. § 92A.200, AgriBioTech, Inc., a Nevada corporation, hereby submits these Articles of Merger for the purpose of merging Lofts Seed Company, Inc., a Nevada corporation and wholly-owned subsidiary of AgriBioTech, Inc., into AgriBioTech, Inc.

### ARTICLE I. Corporations Proposing to Merge and Surviving Corporation

The name of the merging corporation is Lofts Seed Company, Inc., a Nevada corporation (hereinafter called the "Subsidiary Corporation"); and the name of the corporation which shall be the surviving corporation is AgriBioTech, Inc., a Nevada corporation (hereinafter called the "Parent Corporation").

## ARTICLE II. Adoption of Plan of Merger

The Plan of Merger set forth in Article IV was duly adopted by the Parent Corporation and the Subsidiary Corporation.

## ARTICLE III. Approval by Shareholders

Pursuant to N.R.S. § 92A.180, neither the approval of the Shareholders of the Parent Corporation, nor the approval of the Shareholders of the Subsidiary Corporation was required.

## ARTICLE IV. Plan of Merger

The following Plan of Merger was duly approved on November 15, 1999, in the manner prescribed by law with respect to each of the corporations participating in the Merger:

Section 1. Corporations Proposing to Merge and Surviving Corporation. The name of the merging corporation is Lofts Seed Company, Inc., a Nevada corporation (hereinafter called the "Subsidiary Corporation"); and the name of the corporation which shall be the surviving corporation is AgriBioTech, Inc., a Nevada corporation (hereinafter called the "Parent Corporation").

- Section 2. <u>Effective Time of Merger</u>. The effective time of the merger shall be November 29, 1999 at 11:59 p.m. E.S.T. (the "Effective Time").
- Section 3. <u>Effects of Merger</u>. The Merger shall have the effects set forth in N.R.S. § 92A.250.
- Section 4. <u>Conversion of Shares</u>. Each share of capital stock of the Subsidiary Corporation issued and outstanding at the Effective Time shall, as of the Effective Time, by virtue of the Merger and without any action on the part of the holder thereof, be canceled and extinguished without consideration given therefor. The shares of capital stock of the Surviving Corporation shall continue to be outstanding without change.
- Section 5. <u>Articles of Incorporation and Bylaws</u>. The Articles of Incorporation and the Bylaws of the Surviving Corporation as in effect immediately prior to the Effective Time shall become the Articles of Incorporation and Bylaws of the Surviving Corporation following the Effective Time until changed in accordance with their terms and applicable law.

[Signature page to follow]

This the /5 day of November, 1999.

AGRIBIOTECH, INC., a Nevada corporation
By:
Randy Ingram, Executive Vice President
By: Doyles A Fril
Douglas A. Fisher, Secretary
LOFTS SEED COMPANY, INC., a Nevad corporation  By:
Randy Ingram, President
By: Dought A Fis L
Douglas A. Fisher, Secretary

# RECORDATION FORM COVER SHEET PVP CERTIFICATES ONLY

,	. Please record the attached original documents or copy thereof.
Name of conveying party(ies):	2. Name and address of receiving party(ies):
LOFTS SEED COMPANY, INC.	Name: BANKAMERICA BUSINESS CREDIT, INC.
<ul> <li>□ Individual(s)</li> <li>□ General Partnership</li> <li>□ Limited Partnership</li> <li>□ Corporation - State</li> <li>□ Nevada</li> <li>□ Other</li> </ul>	Street Address: 55 South Lake Avenue, Suite 900  City: Pasadena State: California ZIP: 91101
Additional name(s) of conveying party(ies) attached? □ Yes ☑ No	☐ Individual(s) citizenship
3. Nature of conveyance:  □ Assignment □ Merger  □ Security Agreement □ Change of Name □ Other	☐ Association ☐ ☐ General Partnership ☐ Limited Partnership ☐ Corporation-State ☐ Delaware ☐ Other ☐ Other ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐
☐ Other Execution Date: June 23,1998	If assignee is not domiciled in the United States, a domestic representative designation is attached: □ Yes □ No (Designation must be a separate document from Assignment) Additional name(s) & address(es) attached? □ Yes ☒ No
4. PVP certificate identifying information:	
A. PVP No.: <b>8200ø187</b>	
B. Date certificate issued or application filed: 07/21/83	
C. Variety: "GEORGE	TOWN" Bluegrass, kentucky
Additional numbe	rs attached? □ Yes ⊠ No
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Tamsen Valoir  Jenkens & Gilchrist Internal Address:	6. Total number of PVP applications or certificates involved: 1 7. Total fee (37 CFR 3.41): \$ 25.00  ■ Enclosed
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Tamsen Valoir  Jenkens & Gilchrist Internal Address:  Street Address: 1445 Ross Avenue,	6. Total number of PVP applications or certificates involved: 1 7. Total fee (37 CFR 3.41): \$
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Tamsen Valoir  Jenkens & Gilchrist	6. Total number of PVP applications or certificates involved: 1 7. Total fee (37 CFR 3.41): \$
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Tamsen Valoir  Jenkens & Gilchrist Internal Address:  Street Address: 1445 Ross Avenue,  Suite 3200  City: Dallas State: Texas Zip: 75202-2799	6. Total number of PVP applications or certificates involved: 1 7. Total fee (37 CFR 3.41): \$
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Tamsen Valoir  Jenkens & Gilchrist Internal Address:  Street Address: 1445 Ross Avenue,  Suite 3200  City: Dallas State: Texas Zip: 75202-2799	6. Total number of PVP applications or certificates involved: 1 7. Total fee (37 CFR 3.41): \$ 25.00  ■ Enclosed □ Authorized to be charged to deposit account.  8. Deposit Account number: (Attach duplicate copy of this page if paying by deposit account)

#### PVP CERTIFICATE ASSIGNMENT

WHEREAS, LOFTS SEED COMPANY, INC., a Nevada corporation ("Assignor"), having a business address of 191 Budd Blvd., Winston Salem, NC 27114, is the owner of the pending or issued Plant Protection Act (PVP) certificate(s) listed below; and

WHEREAS, BankAmerica Business Credit, Inc., a Delaware corporation, having an office at 55 South Lake Avenue, Suite 900, Pasedena, California 91101 as "Agent" for the "Lenders" as defined and described in the Loan and Security Agreement dated as of June 23, 1998 ("Assignee"), is desirous of acquiring a SECURITY INTEREST in such PVP certificate(s);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, said Assignor does hereby sell, assign, transfer and set over unto the said Assignee a SECURITY INTEREST in, to, and under the PVP certificate(s):

No. 9600256 Pending

No. 9200256 Issued

No. 9500090 Pending

No. 9600228 Pending

No. 9600277 Pending

No. 8100157 Issued

No. 8200187 Issued

No. 8800230 Issued

No. 9500238 Pending

No. 8900288 Issued

No. 9300200 Pending

No. 9500129 Pending

No. 8000153 Issued

No. 8200175 Issued

No. 8700195 Issued

No. 8800235 Issued

No. 9000240 Issued

No. 9200209 Pending

No. 9200210 Pending

No. 9200211 Pending

No. 9200212 Pending

No. 8200177 Issued

No. 8200178 Issued

No. 8400148 Issued

No. 8200168 Issued

No. 9100254 Issued

No. 9500128 Issued

LOFTS SEED COMPANY, INC.

Printed Name: Henry A. Ingalls

Title: Vice President

STATE OF TEXAS

§

**COUNTY OF DALLAS** 

8

Henry A. Ingalls, Vice President, of LOFTS SEED COMPANY, INC., personally appeared before me, and being first duly sworn declared that he signed the security agreement in the capacity designated, and further states that he has read the above security agreement, and the statements therein contained are true.

SUBSCRIBED AND SWORN TO before me this 23 day of June, 1998.

Notary Public In and for the State of Texa

My Commission Expires:

Printed Name

Gregory J. Hausdorf Notary Public, State of Taxas My Comm. Expires 08/15/00

# INITED STATES DEPARTMENT OF AGRICULTURE PLANT VARIETY PROTECTION OFFICE

#### **CERTIFICATE OF MAILING**

BOX ASSIGNMENT
Acting Commissioner of the Plant Variety Protection Office
Plant Variety Protection Office
10301 Baltimore Blvd.
Beltsville, MD 20705-2351.

Dear Sir:

I hereby certify that this correspondence,

74 Cover sheets
74 Assignments
Check in the amount of \$1,850.00 (74 x \$25.00)
74 Return postcards

for the attached (in Exhibit A) PVP certificate numbers are being deposited with the United States Postal Service as Express Mail, mailing label number EE507465254US, postage prepaid, in an envelope addressed to:

BOX ASSIGNMENT
Acting Commissioner of the Plant Variety Protection Office
Plant Variety Protection Office
10301 Baltimore Blvd.
Beltsville, MD 20705-2351.

Tamsen Valoir

Date: July 1, 1998

IPHOU:15412.1 20992-00039

Jenkens & Gilchrist

1100 LOUISIANA STREET, SUITE 1800 HOUSTON, TEXAS 77002 TEXAS COMMERCE BANK, N.A. 301 W. BEAUREGARD SAN ANGELO, TEXAS 76903 903870

July 1, 1998

\*\$1,850.00\*

\*One Thousand Fifty Dollars and 00 Cents\*

ORDER OF U. S. Department Of Agriculture Plant Variety Protection Office

TWO SIGNATURES REQUIRED OVER \$2500

VOID AFTER 180 DAYS NOT VALID FOR OVER \$5000

#0903870# #1111300880# #06300009654#

# SECURITY AGREEMENT AGRICULTURAL INTELLECTUAL PROPERTY COLLATERAL (Plant Variety Protection Act Certificates)

STATE OF	)
	) SS.:
COUNTY OF	)

WHEREAS, LOFTS SEED INC., a New Jersey corporation (the "Company"), is the listed owner of certain plant variety protection applications and certificates issued by the United States Department of Agriculture Plant Variety Protection Office (the "PVPO")all of which are as of this date as set forth on Schedule A (the "PVPs"), and

WHEREAS, the Company is the sole owner of the entire right, title and interest in and to the PVPs except as otherwise indicated in Schedule A and

WHEREAS, the Company has entered into a Loan and Security Agreement, dated on or about the date hereof (the "Loan Agreement"), between the Company as borrower and Branch Banking and Trust Company (the "Lender"), pursuant to which the Lender has, on the date hereof, made certain loans and other financial accommodations to the Company and may, from time to time hereafter, make additional loans to the Company, and

WHEREAS, pursuant to the Loan Agreement, the Company has agreed to grant to the Lender a continuing security interest in, and a continuing lien on, all of the Company's right, title and interest in and to the following (collectively the "Agricultural Intellectual Property Collateral"),

- (a) the PVPs, and
- (b) all proceeds thereof to which the Company is entitled, including, but not limited to, any claims and demands arising out of any infringement of the PVPs, including the right to settle disputes concerning such claims and demands,

to secure the payment and performance of the Obligations and Other Obligations (as defined in the Loan Agreement).

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, the Company does hereby grant to the Lender a continuing security interest in, and a continuing lien on, the Company's rights in the Agricultural Intellectual Property Collateral as security for the payment and performance of the Secured Obligations.

The Company hereby appoints Lender with full power of substitution, to file and record this Security Agreement in the PVPO, to transact all business in the PVPO, to receive any confirmatory documents relating thereto, and to take any and all action before the PVPO to give effect to this Agreement and to the Loan Agreement referred to herein.

The Company hereby further acknowledges and affirms that the rights and remedies of the Lender with respect to the security interest in and lien upon the Company's rights in the Agricultural Intellectual Property Collateral made and granted hereby are more fully set forth in the Loan Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein.

Further, by this Security Agreement, the Company agrees to assign to Lender, upon the occurrence of an Event of Default by the Company (as defined in the Loan Agreement), all of the Company's rights in and to the Agricultural Intellectual Property Collateral; provided that this assignment is expressly contingent upon the occurrence of an Event of Default.

This Security Agreement will become effective June 28, 1996 at the Effective Time of the Merger of Budd Acquisition, Inc., a New Jersey corporation, with and into Lofts Seed Inc., a New Jersey corporation, as provided in a Certificate of Merger to be filed with the New Jersey Secretary of State's office.

IN WITNESS WHEREOF, the Company has caused this Security Agreement to be duly executed by its authorized officer of agent as of June 28, 1996.

[Corporate Seal]

LOFTS SEED INC.

Title: CEO

On June 28, 1996, Richard P.Du Id personally came before me, Frances D. Swing, a Notary Public for said County and State, Richard P. Buld who being by me duly sworn, says that he is of Lofts Seed Inc., and that said writing was signed and sealed by him on behalf of said corporation by its authority duly given. The said Nichard P. Budd acknowledged the said writing to be the act and deed of the corporation.

WITNESS my hand and notarial seal.

My Commission Expires: 2-9-97

Dated this 28 day of June 1996.

COUNTY OF FORSYTH FRANCES D. SWING

R#0185253.01

# SCHEDULE A AGRICULTURAL INTELLECTUAL PROPERTY COLLATERAL (CERTIFICATES OF PLANT VARIETY PROTECTION)

## A. KENTUCKY BLUEGRASS

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Princeton P105	9600228	4-22-96	Pending	
Eagleton	9600277	6-11-96	Pending	
Preakness	9500090	2-13-95	Pending	· · · · · · · · · · · · · · · · · · ·
Mystic	8100157	8-26-81	5-27-82	5-27-00
Georgetown	8200187	1982	7-24-83	7-21-01
Lofts 1757	8800230	1988	9-30-92	9-30-10
Laser (Rough Bluegrass)	8900288	1989	10-31-91	10-31-09
Co-owned PVPs				
243 (Nassau)*	8400005	1983	12-21-84	12-21-02
Suffolk*	8800072	1988	5-31-88	5-31-06
Ram I**	7800069	1978	3-15-79	3-15-96

- Jacklin Seed Company listed as co-owner
- \*\* Mrs. Barbara B. Curtis listed as co-owner

## B. PERENNIAL RYEGRASS

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Palmer	8200178	9-8-82	5-31-84	5-31-02
Palmer II	9200209	6-16-92	Pending	
Prelude	8200177	9-8-82	5-31-84	5-31-02
Prelude II	9200210	6-16-92	Pending	
Yorktown III	9200212	6-16-92	Pending	

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Repell	8400148	8-30-84	11-29-85	11-29-03
Yorktown II	7800001	10-6-77	5-1-80	5-1-97
Repell II	9200211	6-16-92	Pending	

# C. TALL FESCUE

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Rebel	8000153	8-21-80	5-14-81	5-14-99
Rebel III	9500129	4-10-95	Pending	
Rebel Jr.	9000240	1990	11-30-92	11-30-10
Rebel 3D	9300200	4-21-93	Pending	
Tribute	8800235	9-15-88	2-28-90	2-28-08
Clemfine	8200175	9-7-82	2-28-83	2-28-01
Rebel II	8700195	1987	1-15-88	1-15-06

# D. FINE FESCUE

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Reliant	8200168	1982	2-28-83	2-28-01
Jamestown II	9100254	1991	8-31-95	8-31-15

# E. BENTGRASS

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
L93	9600256	5-8-96	Pending	
Southshore	9200256	1992	10-31-94	10-31-12

# F. OTHER

VARIETY NAME	NUMBER	DATE APPLIED	DATE ISSUED	EXPIRES
Salty (weeping alkaligrass)	9500128	4-10-95	Pending	
Laser II (rough bluegrass)	9500238	6-15-95	Pending	